

# SF2 250-350 series

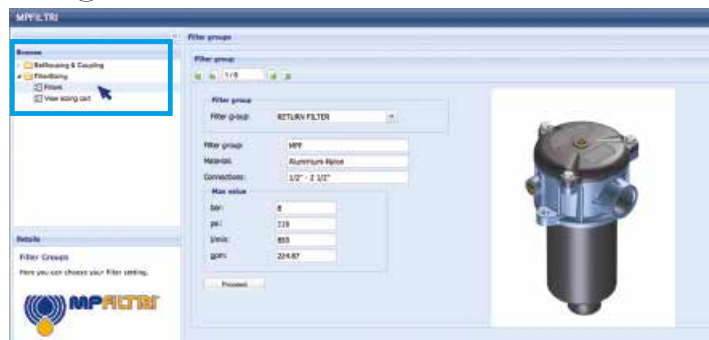
Flow rate up to 160 l/min



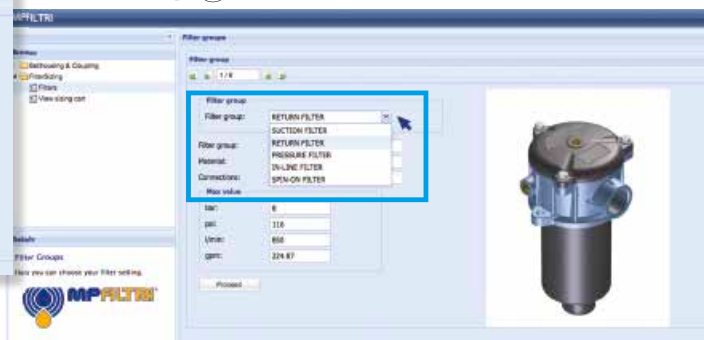


# TYPICAL FILTER SIZING Selection Software

**Step 1** Select "FILTERS"



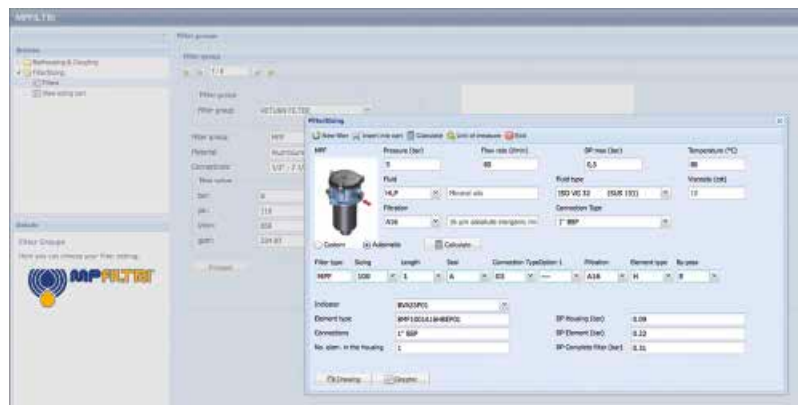
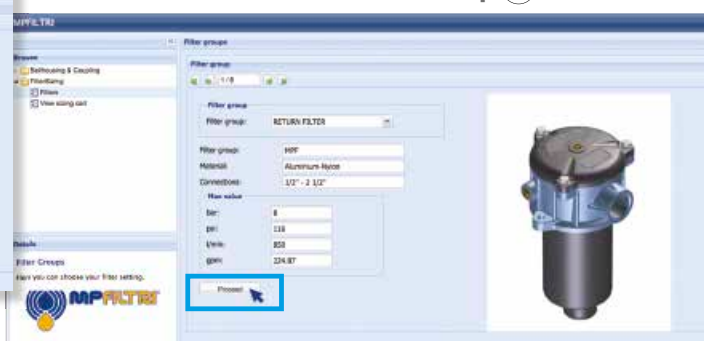
**Step 2** Choose filter group (Return Filter, Pressure Filter, etc.)



**Step 3** Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



**Step 4** Push "PROCEED"



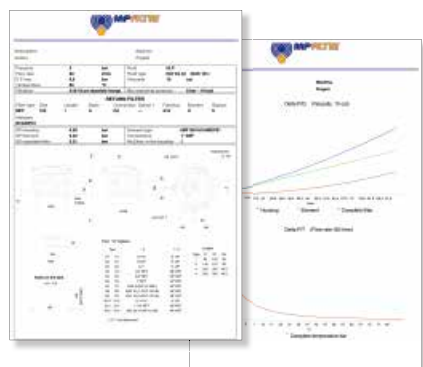
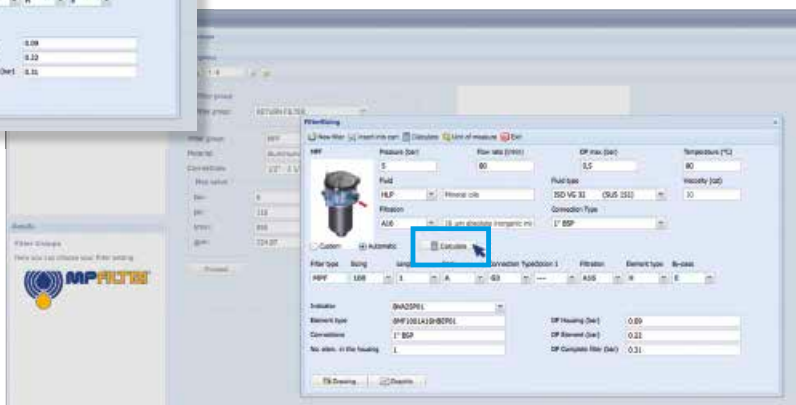
**Step 5**

Insert all application data to calculate the filter size following the sequence:

- working pressure
- working flow rate
- working pressure drop
- working temperature
- fluid material and fluid type
- filtration media
- connection type

**Step 6**

Push "CALCULATE" to have result; in case of any mistake, the system will advice which parameter is out of range to allow to modify/adjust the selection



**Step 7**

Download PDF Datasheet "Report.aspx" pushing the button "Drawing"



# SF2 250-350 GENERAL INFORMATION

## Description

## Technical data

### Suction filters

#### Flow rate up to 160 l/min

SF2 250 and SF2 350 are ranges of suction filters with integrated shut-off valve for protection of the downstream pump against the coarse contamination.

They are placed below the minimum oil level, directly connected to the suction line of the pump.

They can be fitted on the side or below the tank, allowing a more flexible design of the tank.

The shut-off valve closes automatically when the cover is removed, allowing the filter element replacement without the fluid drop.

#### Available features:

- Female threaded connections up to 1" and flanged connections up to 1 1/2", for a maximum flow rate of 160 l/min
- Multiple connections, to connect several suction lines
- Bypass valve, to relieve excessive pressure drop across the filter media
- Magnetic filter, to hold the ferrous particles
- Visual, electrical and electronic clogging indicators

#### Common application:

- Mobile machines
- Industrial equipment

### Filter housing materials

- Filter body: Aluminium
- Cover: Polyamide, GF reinforced
- Valve: Polyamide, GF reinforced - Steel
- Anti-Emptying valve: Steel

### Bypass valve

Opening pressure 30 kPa (0.3 bar)  $\pm 10\%$

### Elements

Fluid flow through the filter element from IN to OUT

### Seals

- Standard NBR series A
- Optional FPM series V

### Temperature

From -25 °C to +110 °C

### Note

SF2 250-350 filters mounting, see the drawings on page 43 and following.



## Weights [kg]

Filter series	
<b>SF2 250</b>	2.6
<b>SF2 350</b>	2.6

# GENERAL INFORMATION SF2 250-350

FILTER ASSEMBLY SIZING  
Flow rates [l/min]

Filter series	Filter element design - N Series					
	M25	M60	M90	M250	P10	P25
SF2 250	147	151	155	160	85	132
SF2 350	147	151	155	160	85	132

## Maximum flow rate for a complete suction filter with a pressure drop $\Delta p = 0.08$ bar.

The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

For different pressure drop or fluid viscosity we recommend to use our selection software available on [www.mpfiltri.com](http://www.mpfiltri.com).

You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

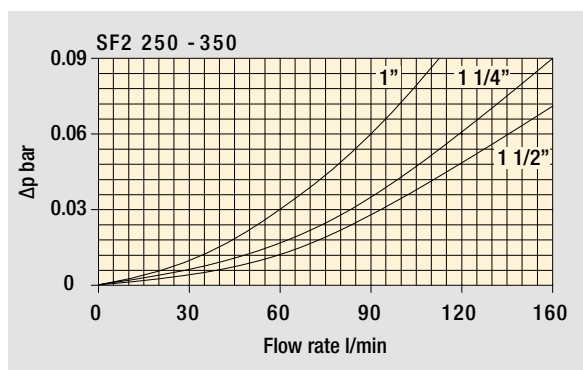
## Hydraulic symbols

Filter series	Style R - S		Style Q - H	
SF2 250	•		•	
SF2 350		•		•

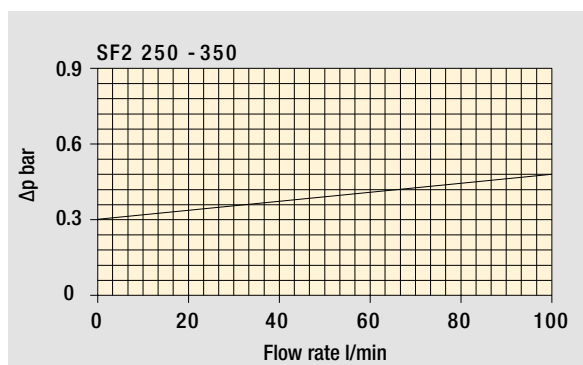
  

## Pressure drop

Filter housings  $\Delta p$  pressure drop



Bypass valve pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  $\Delta p$  varies proportionally with density.

# SF2 250-350

## Designation & Ordering code

### COMPLETE FILTER

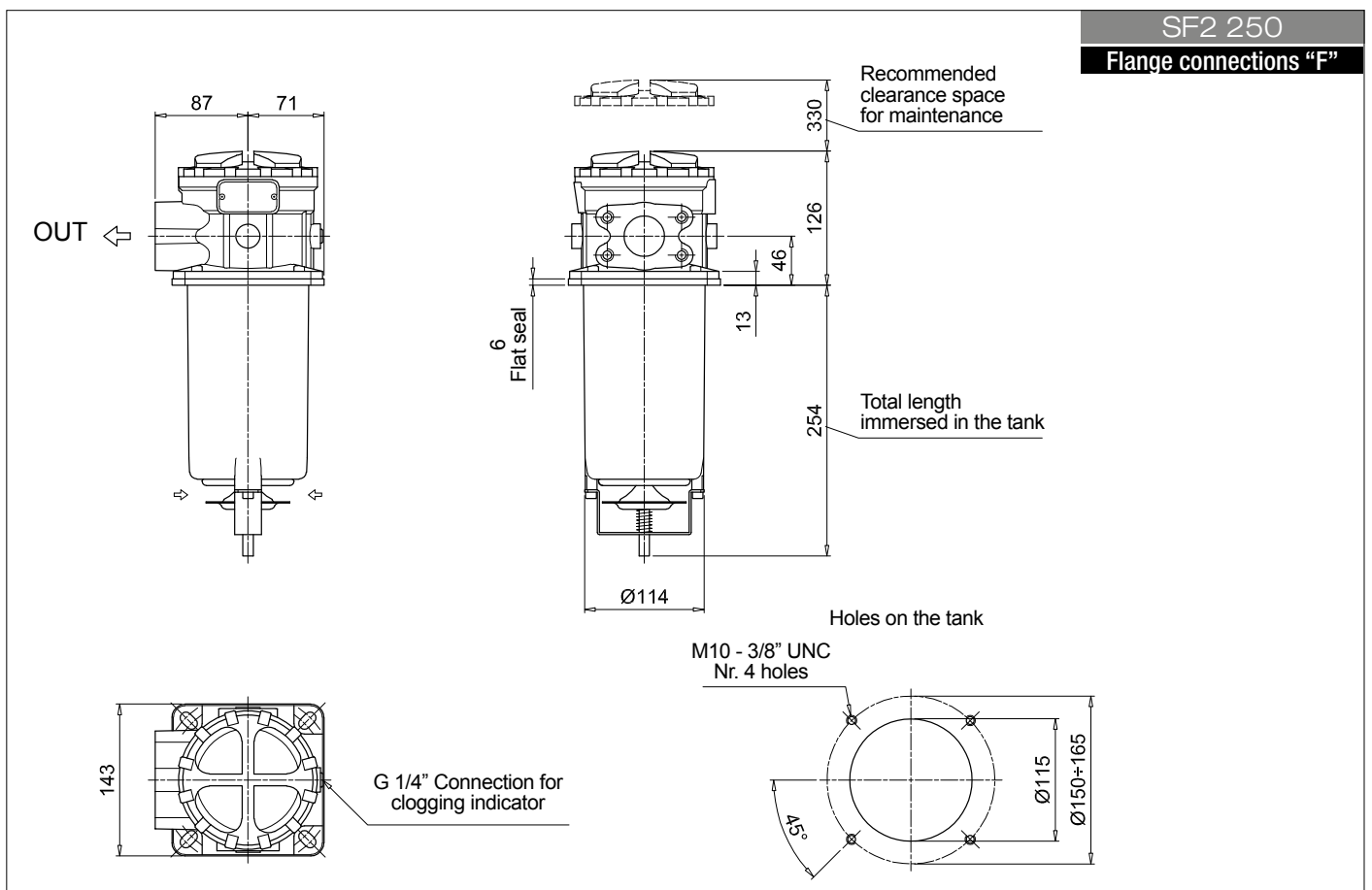
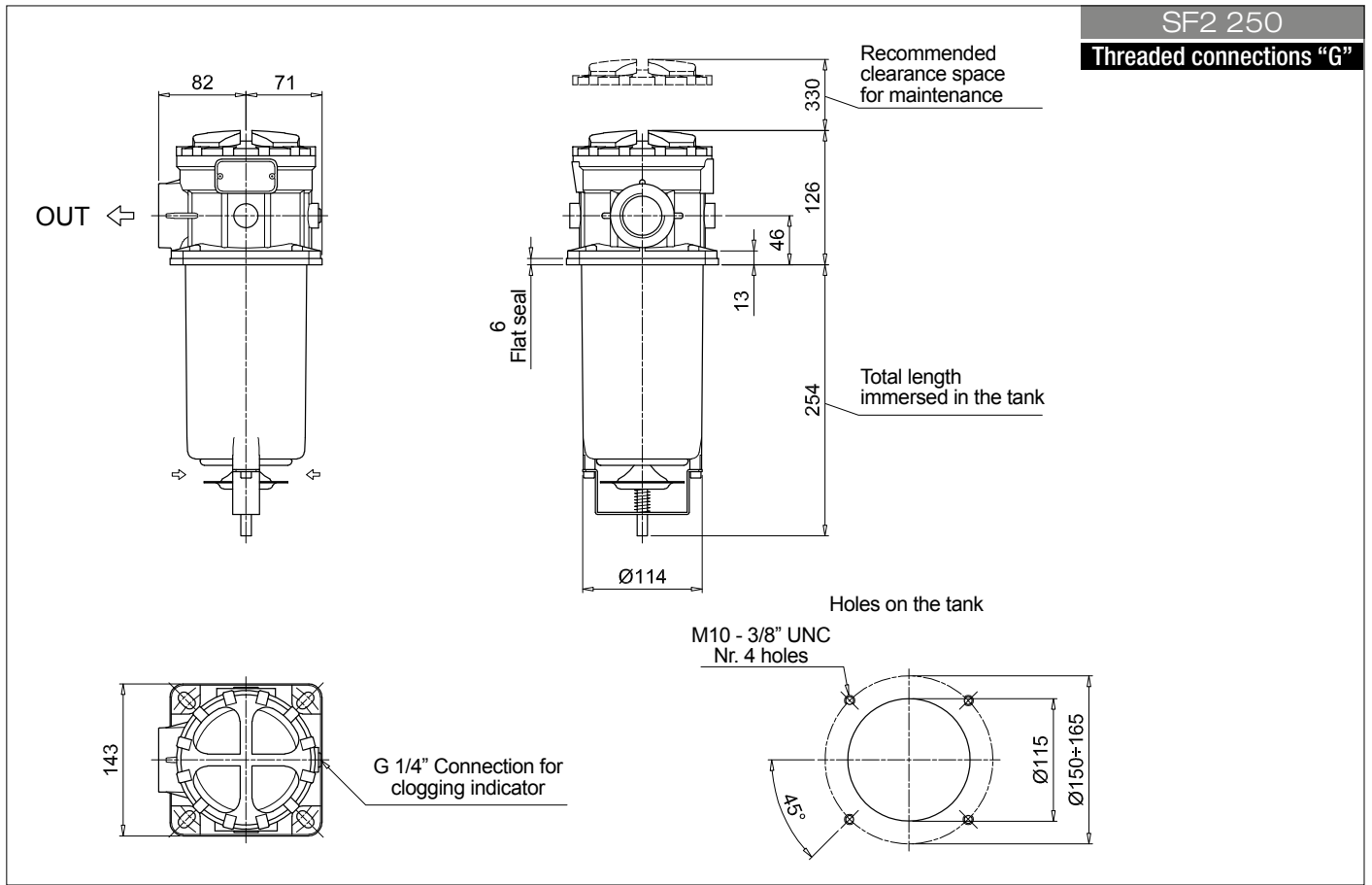
<b>Series and size</b>		Configuration example 1: <b>SF2250</b> <b>W</b> <b>F2</b> <b>R</b> <b>M25</b> <b>P01</b>					
<b>SF2250</b>		Configuration example 2: <b>SF2350</b> <b>A</b> <b>G1</b> <b>S</b> <b>M90</b> <b>P01</b>					
<b>SF2350</b>							
<b>Seals and treatments</b>		Filtration rating					
		Mxx	Pxx				
<b>A</b>	NBR	•	•				
<b>V</b>	FPM	•	•				
<b>W</b>	NBR compatible with fluids HFA-HFB-HFC	•					
<b>Z</b>	FPM compatible with fluids HFA-HFB-HFC	•					
<b>Connections</b>		Aux (only SF2350)	SF2250	SF2350			
<b>G1</b>	G 1 1/2"	G 1"	•	•			
<b>G2</b>	1 1/2" NPT	-	•				
<b>G3</b>	SAE 24 - 1 7/8" - 12 UN	SAE 16 - 1 5/16" - 12 UN	•	•			
<b>G4</b>	G 1 1/4"	-	•				
<b>G5</b>	1 1/4" NPT	-	•				
<b>G6</b>	SAE 20 - 1 5/8" - 12 UN	-	•				
<b>G7</b>	G 1"	-	•				
<b>G8</b>	1" NPT	-	•				
<b>G9</b>	SAE 16 - 1 5/16" - 12 UN	-	•				
<b>F1</b>	1 1/2" SAE 3000 psi/M	-	•				
<b>F2</b>	1 1/2" SAE 3000 psi/UNC	-	•				
<b>Bypass valve and magnetic filter</b>							
<b>R</b>	With bypass, with magnetic filter	<b>Q</b>	Without bypass, with magnetic filter				
<b>S</b>	With bypass, without magnetic filter	<b>H</b>	Without bypass, without magnetic filter				
<b>Filtration rating (filter media)</b>							
<b>M25</b>	Wire mesh 25 µm	<b>P10</b>	Resin impregnated paper 10 µm				
<b>M60</b>	Wire mesh 60 µm	<b>P25</b>	Resin impregnated paper 25 µm				
<b>M90</b>	Wire mesh 90 µm						
<b>M250</b>	Wire mesh 250 µm						
				<b>Execution</b>			
				<b>P01</b> MP Filtri standard			
				<b>Pxx</b> Customized			

### FILTER ELEMENT

<b>Element series and size</b>		Configuration example 1: <b>SF250</b> <b>M25</b> <b>W</b> <b>P01</b>			
<b>SF250</b>		Configuration example 2: <b>SF250</b> <b>M90</b> <b>N</b> <b>P01</b>			
<b>Filtration rating (filter media)</b>					
<b>M25</b>	Wire mesh 25 µm	<b>P10</b>	Resin impregnated paper 10 µm		
<b>M60</b>	Wire mesh 60 µm	<b>P25</b>	Resin impregnated paper 25 µm		
<b>M90</b>	Wire mesh 90 µm				
<b>M250</b>	Wire mesh 250 µm				
<b>Seals and treatments</b>		Filtration rating			
		Mxx	Pxx		
<b>N</b>	NBR	•	•		
<b>V</b>	FPM	•	•		
<b>W</b>	NBR compatible with fluids HFA-HFB-HFC	•			
<b>Z</b>	FPM compatible with fluids HFA-HFB-HFC	•			
				<b>Execution</b>	
				<b>P01</b> MP Filtri standard	
				<b>Pxx</b> Customized	

### ACCESSORIES

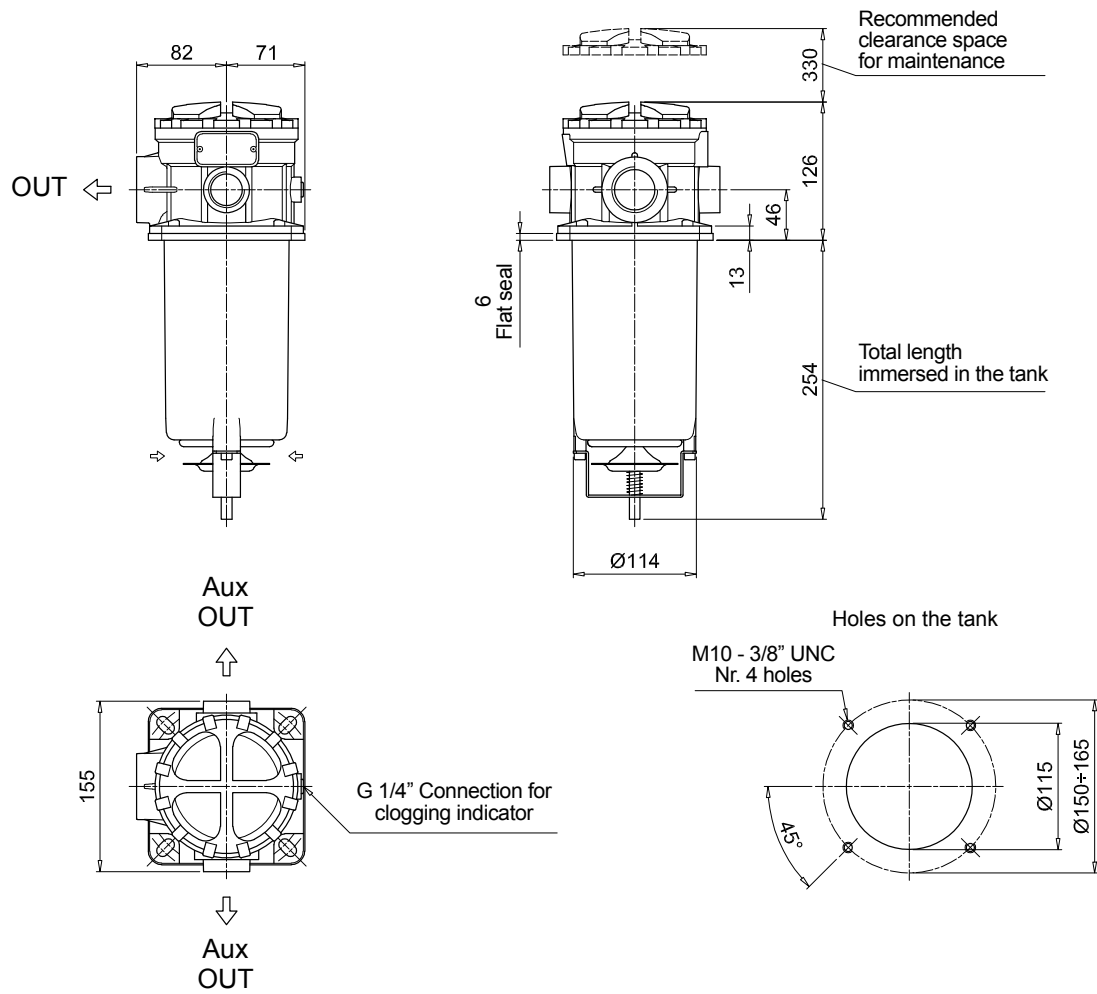
<b>Clogging indicators</b>		page
<b>VVA</b>	Axial vacuum gauge	59
<b>VVR</b>	Radial vacuum gauge	59
<b>VEA</b>	Electrical vacuum indicator	58
<b>VLA</b>	Electrical / visual vacuum indicator	58



# SF2 250-350

## Dimensions

SF2 350



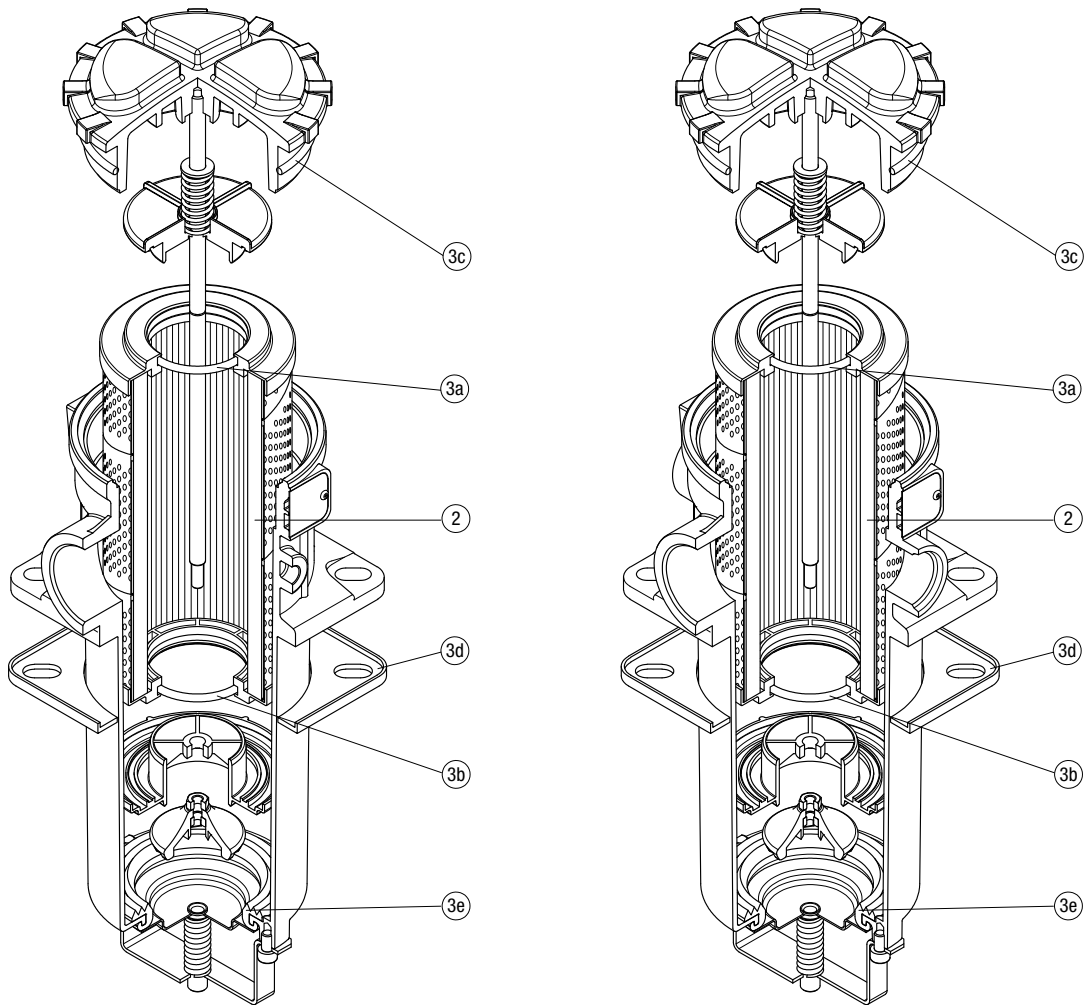


# SPARE PARTS SF2 250-350

Order number for spare parts

SF2 250

SF2 350



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number	
SF2 250 - 350	See order table	NBR	FPM
	2	02050586	02050587
		3 (3a ÷ 3e)	